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Cobalt(II) complexation with immobilized proteinases of candida albicans

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Abstract

Complexation of cobalt(II) ion with proteolytic enzymes of Candida albicans (SAP C.alb.) of induced (ISAP C.alb.) and constitutive (CSAP C.alb.) types immobilized on the cellulose nitrate membrane surface has been studied. The maximal sorption capacity of cellulose nitrate membranes with covalently immobilized induced proteinase ISAP C.alb. with respect to Co(II) ions is 16.5 μmol/cm 2, and that for CSAP C.alb. is 27.7 μmol/cm 2. The model of fixed polydentate centers has been used for describing complex for- mation. The complexation constants (Gn) and the average number of immobilized ligands coordinated to one metal atom (n) have been determined. The specificity of binding of immobilized enzyme molecules to Co(II) ion has been assessed. © Pleiades Publishing, Ltd., 2012.

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